

Do Runoffs Pay?

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One of the ongoing debates amongst farmers and consultants is whether runoffs pay. Last summer Brendan Richards, as part of his Master of Applied Science studies at Lincoln University, decided to get some numbers on what has been happening with runoffs in Canterbury.

Following discussion with several dairy farm consultants, Brendan identified six case study farmers who had diverse farming systems on a range of different land types. All had previously purchased a runoff, and were thought likely to have good records. The six farmers each agreed to spend time with Brendan to identify the current and historical details. All farmers were visited twice.

Most Canterbury farmers use the 'milking platform' concept whereby only lactating cows are run on the dairy farm. The question, therefore, is whether to also own a runoff, or rely on purchased feed and agistment.

There were three key drivers of why the six case study farmers had purchased runoffs. The first and most important was that it gave them control. They used terms such as 'self containment', 'self reliance' and 'controlling my own destiny'. It was part of their risk management strategy. They were also influenced by opportunities for increased profitability but this clearly came second. The third reason was that they enjoyed having a runoff. It gave variety away from the milking platform activities. One farmer described it as his jet boat and holiday house. Another said it gave him a new challenge as he was sick of milking cows and shifting irrigators all day.

All farmers used their runoff for wintering cows. However, there was considerable diversity as to the other uses that farmers made of their runoffs.

Farmer A used 69% of the feed grown to winter his cows (792kg per cow), with the remainder being converted to silage for feeding to milking cows. He achieved this with 0.4 ha of mainly dryland runoff to every 1 ha of milking platform land. Heifers were agisted elsewhere. His runoff investment (at current market values for land) was \$1540 per cow, and \$14,000/runoff hectare.

Farmers B, C and D achieved total containment of all their feed supplies for cows and heifers and also pursued other diversified activities. This included some cropping and growing out of dairy beef animals. They had 0.86-0.88 ha of irrigated runoff per ha of milking platform. Runoff capital ranged from \$5150-\$5870 per cow, and \$19,250-\$21,050 per runoff hectare.

Farmer E had only 0.56 ha of runoff per ha of milking platform. However, it was all irrigated. He was able to not only provide 1050kg of winter feed per cow, but also to provide 560kg of milking feed per cow. He was also able to make substantial sales of silage to other farmers.

Farmer F achieved total containment over feed supplies with 0.98ha of irrigated runoff per ha of milking platform. Runoff capital investment was \$8640 per cow and \$26,500 per runoff ha. The high capital values are caused by subdivision potential of the land.

The amount of runoff feed provided per cow, either during winter or transferred as silage for milking feed, ranged from 830kg to 1620 kg per cow. The lowest figure was for the lowest stocked farm (2.9 cows per ha and 370kg MS per cow). The three farms with the highest runoff inputs per cow (1320-1620 kg DM per cow) also had the highest inputs per hectare of milking platform (4500-6300kg DM per ha) and the highest production per cow. (425-470 kg MS).

Revenue was calculated for each runoff based on the market value of the feed consumed on the runoff, plus any cash sales of feed or other crops. Where beef animals were raised then revenue was calculated as change in value. Costs included all cash costs, plus any non cash costs such as labour, plus depreciation on runoff equipment.

Cash returns on capital for the 2004/05 year ranged from 3.4% to 6%, with four of the farms returning less than 4%. These returns were measured relative to current market values and would have been very much higher relative to the original costs of land purchase, which had typically occurred four to six years previously.

Capital gains have been very substantial for these runoff owners, ranging from 15.5% to 23.9% compound growth per annum since the time of purchase. The enormity of these gains meant that in all cases the purchase had been an excellent investment. However, the low cash returns meant that a new farmer purchasing at current market values could not afford to pay interest on more than 50% debt funding, without support from cash returns earned elsewhere.

Although Brendan Richards set out to answer the question of whether these runoffs were profitable, he ended up finding out a lot more. The variations both in runoff area per ha of milking platform (ranging from 0.4ha to almost 1 ha), and in runoff investment per cow (\$1540 to \$8640) are remarkable. They provide us with a set of benchmarks against which other farmers may like to compare their own operations. What was also interesting was that despite the diversity of investment and inputs per cow, all farmers

had management systems that seemed to use the land effectively. . There was no clear evidence that either the low or high investment strategies were superior.

Brendan's background before coming to Lincoln in 2002 was from a sheep and beef property. Since completing his studies Brendan has taken a first level management position on a dairy farm in the Nelson region.